

The Political Challenges of Large Commons Problems

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On the fiftieth anniversary of Hardin’s “Tragedy of the Commons” [1] we have reason both for hope and concern. Although population growth is still a concern, it has been outpaced by advances in food production. At the same time, our oceans are becoming a garbage dump, our climate is changing, and we confront a host of other global commons problems from the littering of orbits around the earth to the overuse of antibiotics. These problems can be costly if they are left to fester. For instance, the future costs of climate change have been conservatively estimated to be nontrivial fractions of GDP - well into the tens of trillions of dollars [2,3], and could range much higher.

We have the ability to solve these problems. Over the past five decades we have come to a deep understanding of commons problems. They are not zero-sum games: instead they offer significant gains from cooperation. Elinor Ostrom documented how small-scale societies manage their commons problems and realize these gains. However, she also commented that “In some settings, however, rampant opportunistic behavior severely limits what can be done jointly without major investments in monitoring and sanctioning arrangements.” [4, p36] Game theory and market design have helped us understand how these incentives can be addressed [5-10]. For instance, taxes as well as cap-and-trade systems can be designed to make the price of emitting carbon include its ultimate social/climate cost, and subsidies can make the prices of alternative technologies reflect their ultimate social benefit, and we have methods for estimating the scale of abatement that is required [11-17].

Ironically, it is not just countries experiencing rapid growth and demand for power that are emitting carbon; but so are the wealthier countries that already burned their way through industrialization and are wealthy enough to afford the shift to alternative sources of power that are ultimately necessary. This means that nearly universal cooperation is needed, including coordinated limits and the willingness and the ability to enforce those limits. However, a challenge with global commons problems is that solving the incentive problems often leads the collective gains to be distributed very unevenly; and the costs can even outweigh the benefits for some parties.

Thus, the main challenges that we face are political [18-22]. There are many players with enormous differences in wealth and interests around the planet - both within and across countries - facing different consequences from commons problems and abilities to pay for them. Crafting a policy that addresses everyone’s needs becomes an even bigger challenge when combined with constantly changing political leadership with short-term perspectives, and impatient citizens who make it difficult to incur large costs today for

benefits that may not accrue for decades and involve considerable uncertainty.¹ As Barack Obama has said² “it is a political problem perfectly designed to repel government intervention. It involves every single country, and it is a comparatively slow-moving emergency, so there is always something seemingly more urgent on the agenda.” The need to align a multitude of interests via churning, short-sighted political systems makes it clear why humans are better at reacting to crises than collectively investing to solve global commons problems.

A natural reaction to this is to try to simplify things by concentrating on one issue at a time. Although this may seem sensible at first blush, the key to crafting policies that address a multitude of interests is actually to couple issues together [23, 24]. If there is an issue on which a group has little to gain and much to lose, then one can only get their consent by including some other issue on which they have much to gain and little to lose. This is a principle underlying omnibus legislation: the packaging of unrelated issues into one large bill [25]. Global organizations such as the UN have wide scope and can envision such compromise; but they are funded at a handful of billions of dollars when tens of trillions are at stake and they lack full international buy-in and trust. The exception is the World Trade Organization: more than half of world GDP crosses country borders. However, the WTO’s scope is limited to trade agreements. One solution to global commons problems would be the empowerment of an organization to have carrots and sticks closer to the order of world trade numbers – more commensurate with what is at stake. Building such an organization with such scope and broad jurisdiction, presents its own challenges. In the absence of a world organization with sufficient jurisdiction and large enough carrots and sticks, there is a need for the leadership of key countries to step up and craft an omnibus agreement that couples commons problems with other issues, with something for everyone. Packaging issues produces an attractive agreement that entices participation, rather than coercing it by threatening non participants with trade sanctions that may run afoul of existing treaties, fuel a trade war, or be costly with which to follow through. Coupling global commons problems with other large issues will complicate our lives, but it is the only way to forge and enforce agreements at an appropriate scale, which everyone will sign onto. Without powerful international leadership, such global commons problems will continue to be ceded to humanitarian organizations and the voluntary behaviors of groups here and there. In the case of climate change, self-imposed taxes and subsidies are woefully short of the required levels. Instead of collectively stopping the damage, localities are individually preparing themselves to cope with rising waters and temperatures and increasingly strong storms and fires, or simply hoping that future inventions will solve our pressing commons

¹ The rioting that accompanied the French attempts to raise taxes on petroleum is a case in point. Such taxes are regressive as they disproportionately impact poorer individuals for whom fuel costs make up a larger fraction of their budget. Combined with rising inequality and worsening economic prospects for less educated individuals, produced a volatile setting in which taxes (which fall far short of those needed to address climate change) ignited a public outcry. Without a direct linking of such taxes together with other benefits for economically disadvantaged individuals, their imposition led to political turmoil.

² The Atlantic, April 2016, Jeffrey Goldberg “The Obama Doctrine”.

problems before they become catastrophic. This is not a recipe for the long-term health of our planet.

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